

**SKRINING BAKTERI ENDOFITIK DARI MANGROVE *Lumnitzera littorea*
(COMBRETACEAE) SEBAGAI PENGHASIL ANTIBIOTIKA**

SKRIPSI SARJANA BIOLOGI

OLEH:

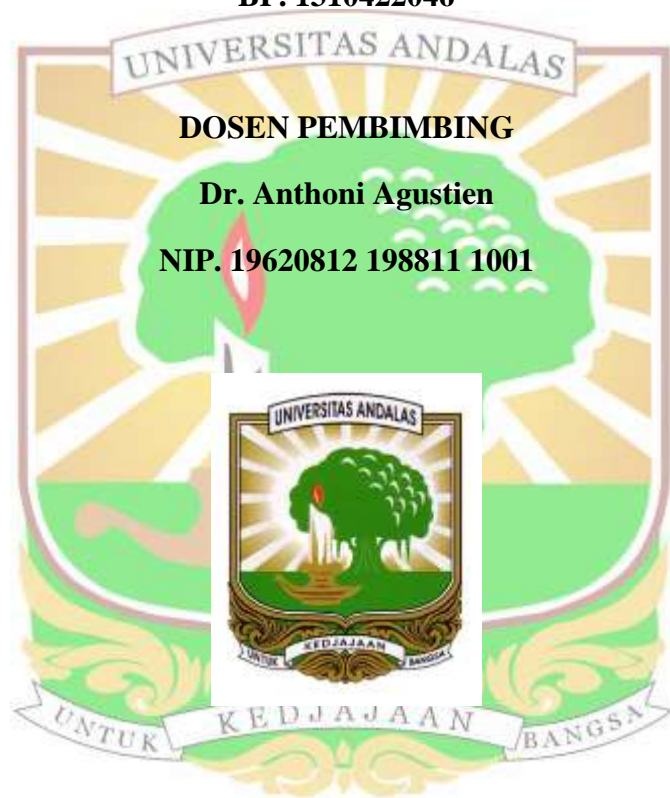
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ABSTRAK

Penelitian “Skrining Bakteri Endofitik dari Mangrove *Lumnitzera littorea* (Combretaceae) Sebagai Penghasil Antibiotika” telah dilaksanakan dari bulan Oktober 2016 sampai Januari 2017 di Laboratorium Mikrobiologi, Jurusan Teknologi Hasil Pertanian, FATETA dan Laboratorium Mikrobiologi FMIPA Unand, Padang. Penelitian ini menggunakan metoda survei dan eksperimen dengan analisa data secara deskriptif. Seleksi bakteri penghasil antibiotika dilakukan dengan metode kertas cakram menggunakan bakteri uji *Escherichia coli* dan *Staphylococcus aureus*. Hasil percobaan telah berhasil diisolasi sebanyak 5 isolat bakteri penghasil antibiotika dari daun *Lumnitzera littorea*, dengan 3 isolat bakteri dapat menghambat pertumbuhan bakteri uji *E. coli*, 4 isolat aktif terhadap *S.aureus* dan 2 isolat aktif terhadap kedua bakteri uji *E. coli* dan *S.aureus*. Karakterisasi secara makroskopis, mikroskopis dan uji biokimia pada 5 isolat bakteri penghasil antibiotika dikelompokkan kedalam empat genus yakni *Escherichia* sp., *Bacillus* sp.1, *Klebsiella* sp., *Bacillus* sp.2

Kata Kunci: Skrining, bakteri endofitik, *L. littorea*, antibiotika



ABSTRACT

Research about "Screening of Endophytic Bacteria from Mangrove *Lumnitzera littorea* (Combretaceae) as Antibiotic producer" had been carried out from October 2016 to January 2017 at the laboratory of Microbiology, Department of Agricultural Technology, laboratory of Microbiology, Biology Department, Faculty of Mathematics and Natural Science, Andalas University, Padang. This research used the survey method and experimental method with descriptive data analysis. Selection of antibiotic-producing bacteria carried by the method of paper discs using test bacteria *Escherichia coli* and *Staphylococcus aureus*. The results of the experiment have been isolated as much as 5 isolates of antibiotic-producing bacteria *Lumnitzera littorea*, leaves with three isolates of bacteria can inhibit the growth of bacteria *E. coli* test, 4 isolates active against *S. aureus* isolates and 2 active against both bacterial testing of *E. coli* and *S. aureus*. Of characterization are macroscopic, microscopic and biochemical tests on bacteria producing antibiotic 5 isolates were grouped into four genus i.e. *Escherichia* sp., *Bacillus* sp. 1, *Klebsiella* sp., *Bacillus* sp. 2

Key words: Screening, endofitik bacterial, *L. littorea*, and antibiotic.

